Title (en)

COMPOSITE FOR ELECTRODE ACTIVE MATERIAL AND SECONDARY BATTERY COMPRISING THE SAME

Title (de)

VERBUNDSTOFF FÜR EIN ELEKTRODENAKTIVMATERIAL UND SEKUNDÄRBATTERIE DAMIT

Title (fr)

COMPOSITE POUR MATÉRIAU D'ÉLECTRODE ACTIF ET BATTERIE SECONDAIRE COMPRENANT LEDIT COMPOSITE

Publication

EP 2416410 A2 20120208 (EN)

Application

EP 10759012 A 20100330

Priority

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- KR 20090027063 A 20090330

Abstract (en)

Disclosed are a composite which can be used as an electrode active material for a secondary battery, and the secondary battery comprising the same. The composite includes: a first material selected from the group consisting of metals and metalloids capable of being reversibly alloyed with lithium; a second material selected from the group consisting of metals incapable of being alloyed with lithium, compounds containing the metals, and compounds containing metals or metalloids capable of being irreversibly alloyed with lithium; and a third material which is at least one kind of metal having a higher electrical conductivity than the second material, wherein a content of the third material ranges from 10 to 10,000ppm based on the total weight of the composite. In the composite, the third material increases the electrical conductivity, thereby forming an electrical conducting path between materials within the composite. This allows the volume of a battery to be uniformly changed during the charge/discharge. Thus, when the composite is used as an electrode active material for a secondary battery, it is possible to improve a life characteristic of the battery, and minimize a change in a thickness of the electrode.

IPC 8 full level

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Cited by

EP2693533A1; US9879344B2; US9806335B2; US9780357B2; US9196896B2; US9590238B2; US10290860B2; US9484159B2; US9512523B2; US9831500B2

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